

MARIA DEL CARMEN VERA-DIAZ

Global Development and Environment Institute
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EDUCATION

- **Ph.D. Geography and Environment. 2008.** Boston University – Geography and Environment Department, Boston, Massachusetts. Dissertation: “Modeling Soybean Expansion in the Amazon Basin”. Faculty advisor: Robert K. Kaufmann, Ph.D. Graduation, May 2008.
- **M.S. Development Planning. 1997 to 1999.** Federal University of Pará-UFPA. International Master in Planning of the Development – PLADES. Belém, Pará, Brazil. Master Thesis: “Integrating Depletion of the Mineral Reserves into Gross Domestic Product of the State of Pará, 1985-1998.
- **Specialist in Habitat of Amazonian Countries. 1996 to 1997.** Federal University of Pará-UFPA. International Course in Scientific and Technological Politics for the Amazon, CIPCTAM III, PDTU, NAEA. Belém, Pará, Brazil. Monograph: “Public Housing Politics in the Colombian Amazon, the case of Florencia-Caquetá”.
- **Specialist in Financial Administration. 1995 to 1996.** Federal University of Pará - UFPA. Socioeconomic Center (CSE). Belém, Pará, Brazil. Monograph: “Wood exports in the State of the Pará, behavior during the 1991-1995 period”.
- **B.A. in Accounting. 1986 to 1991.** Amazon University. Florencia, Caquetá, Colombia. Senior Thesis: “The commercial development in the urban area of Florencia during the 1980-1990 period”.

AREAS OF SPECIALIZATION

- Econometric modeling of environmental and economic systems
- Geographic Information Systems (GIS)
- Ecological Economics

TECHNICAL CAPABILITIES

- Environments: Unix, Windows, MacIntosh
- GIS software: ArcGIS, Idrisi
- Other Software: Microsoft Word, Excel, PowerPoint, Splus, RATS, Adobe.

EXPERIENCE

- 2008–Present Global Development and Environment Institute, Tufts University, Medford, MA. Senior Research Fellow, Globalization and Sustainable Development Program.
- 2008–Present Conservation Strategy Fund, Boston, MA. Consulting Researcher for the project “Economics-based planning of conservation investments in the Interoceánica Sur Corridor (Peru)”.
- 2008 Geography and Environment Department, Boston University, Boston, MA. Teaching Fellow of Geographic Information Systems.
- 2003 – 2007 Geography and Environment Department, Boston University, Boston, MA. Research Fellow
- 2003–Present Amazon Environmental Research Institute (Instituto de Pesquisa Ambiental da Amazônia – IPAM), Belém, Brazil. Associated Researcher.
- 1999 – 2002 Amazon Environmental Research Institute (Instituto de Pesquisa Ambiental da Amazônia – IPAM), Belém, Brazil. Researcher.
- 1998 – 1999 21 Amazon Project, Federal University of Pará / Nucleus of High Amazon Studies / European Economic Community, Belém, Brazil. Associated Scientist.
- 1991 – 1995 National Institute for Social and Public Housing and Urban Reform (INURBE), Florencia, Caquetá, Colombia. Accountant.
- 1989 – 1990 Corporation for the Development of the Education, Housing and, Health in the Amazon (COREVISA), Florencia, Caquetá, Colombia. Executive Director.

COMPLETED PROJECTS / FUNDING:

- “Assessing the effect of Madera’s energy and transportation infrastructure projects on soybean expansion”. **Principle Investigator**. Conservation Strategy Fund. 2006-2007. Sponsors: U.S. Agency for International Development and the Gordon and Betty Moore Foundation.
- “Agribusiness expansion into the Brazilian Amazon”. **Research Coordinator**. Amazon Environmental Research Institute – IPAM and Woods Hole Research Center - WHRC. 2003-2007. Sponsors: U.S. Agency for International

Development, the Gordon and Betty Moore Foundation, National Science Foundation, and LBA-NASA Ecology.

- “Integration of land use, fire, and carbon flux in critical Amazon landscapes: the Xingu River Headwaters and the BR163 Highway Corridor”. **Investigator**. Large-Scale Biosphere Atmosphere Experiment - LBA, U.S. NASA. 2005-2007.
- “Amazon Scenarios: modeling interactions among land use, fire, and climate”. **Investigator**. Large-Scale Biosphere Atmosphere Experiment - LBA, U.S. NASA. 1998-2007.
- “Fire’s economic costs in the Brazilian Amazon”. **Research Coordinator**. Amazon Environmental Research Institute (IPAM) and Woods Hole Research Center - WHRC. 2000-2003. Sponsors: U.S. Agency for International Development and Large-Scale Biosphere Atmosphere Experiment - LBA, U.S. NASA.

PUBLICATIONS

Submitted and in review

Mann, M., Kaufmann, R., Merry, F., Gopal, S., Vera-Diaz, M.D.C., Kallay, J., Amacher, G., Nepstad, D., and Morton, D. The Economics of Cropland Conversion in Amazonia: The Importance of Rent. Submitted to Proceedings of the National Academy of Sciences of the United States of America (PNAS).

Walker, R., DeFries, R., Vera-Diaz, M.D.C., Venturieri, A. and Shimabokuru, Y. The Expansion of Intensive Agriculture and Ranching in Amazonia. Manuscript, May 2007.

Vera-Diaz, M.D.C., Kaufmann, R., and Nepstad, D. Transportation Infrastructure Development and Soybean Expansion in the Amazon Basin: A Spatial Approach. Manuscript.

2008

Vera-Diaz, M.D.C., Kaufmann, R., Nepstad, D., and Schlesinger, P. 2008. An Interdisciplinary Model of Soybean Yield in the Amazon Basin: the Climatic, Edaphic, and Economic Determinants. *Ecological Economics*, 65(2): 420-431.

2007

Vera-Diaz, M.D.C., Reid, J., Soares-Filho, B., Kaufmann, R., and Fleck, L. 2007. Efectos de los Proyectos de Energía y Transporte en la Expansión del Cultivo de Soya en

la Cuenca del Rio Madera. Conservation Strategy Fund, Serie Técnica No. 7. (Spanish, Portuguese, and English versions).

http://conservation-strategy.org/files/serietecnica7_espanhol_comcapas_baixa.pdf

2006

Alencar, A., Nepstad, D., and Vera-Diaz, M.D.C. 2006. Forest Understory Fire in the Brazilian Amazon in ENSO and non-ENSO Years: Area Burned and Committed Carbon Emissions. *Earth Interactions*, 10 (2006), paper No. 6.

McGrath, D. and Vera-Diaz, M.D.C. 2006. Soja na Amazônia: impactos ambientais e estratégias de mitigação. *Ciencia & Ambiente*, 32 (2006), p. 151-165.

Vera-Diaz, M.D.C. and Amin, Mario. 2006. Estimativa do Valor Ambiental da Exaustão dos Recursos Minerais do Estado do Pará. In: *Amazônia: Ciência & Desenvolvimento / Banco da Amazônia*. v. 2, n. 3 (jul/dez. 2006). Belém: Banco da Amazônia.

2005

Vera-Diaz, M.D.C. and Schwartzman, S. 2005. Carbon Offsets and Land Use in the Brazilian Amazon. In: MOUTINHO, P. and SCHWARTZMAN, S. (Eds), *Tropical Deforestation and Climate Change*. Belém-Pará-Brazil: IPAM (Instituto de Pesquisa Ambiental da Amazônia); Washington D.C. – USA: Environmental Defense, 2005. Chapter 9, p. 93-98.

2004

Soares-Filho, B., Alencar, A., Nepstad, D., Cerqueira, G., Vera-Diaz, MDC., Rivero, S., Solorzano, L., and Voll, E. 2004. Simulating the Response of Land-Cover Changes to Road Paving and Governance along a Major Amazon Highway: The Santarém-Cuiabá Corridor. *Global Change Biology* (2004) 10, 745–764.

Mendonça, M.J., Vera-Diaz, M.D.C., Nepstad, D., Motta, R.S., Alencar, A., Gomes, J.C., and Ortiz, R. 2004. The Economic Costs of the Use of Fires in the Amazon. *Ecological Economics*, 49 (2004), p. 89-105.

Alencar, A., Nepstad, D., McGrath, D., Moutinho, P., Pacheco, P., Vera-Diaz, M.D.C., and Soares-Filho, B. 2004. Desmatamento na Amazônia: Indo além da “Emergência Crônica”. IPAM: Belém, 2004. 85 p.

2002

Nepstad, D., McGrath, D., Alencar, A., Barros, A.C., Carvalho, G., Santilli, M., and Vera-Diaz, M.D.C. 2002. Issues in Amazonia Development. *Science* 295: 1643-1644.

Vera-Diaz, M.D.C., Nepstad, D., Mendonça, M.J., Motta, R.S. da, Alencar, A., Gomes, J., and Ortiz, R. 2002. O Preço Oculto do Fogo na Amazônia: Custos Econômicos associados às Queimadas e Incêndios Florestais (Economic cost of slash-and-burn activities and forest fire in Amazônia). Relatório de Pesquisa (Report). IPAM / WHRC / IPEA, Setembro, 2002. [http:// www.ipam.org.br/perdas.html](http://www.ipam.org.br/perdas.html)

Carvalho, G., McGrath, D., Nepstad, D., and Vera-Diaz, M.D.C. 2002. Brazil's Amazon Policy: Democratic Transition and Enduring Policy Patterns. In *Currents of Change: Globalization, Democratization and Institutional Reform in Latin America* . Ed. J. Behar. Stockholm: Institute of Latin American Studies, Stockholm University.

Vera-Diaz, M.D.C. Perspectivas do Meio Ambiente no Brasil (Global Environment Outlook-Brazil Report). GEO Brasil-2002. Scenarios for the Environmental Management (Chapter 4). Brasília: IBAMA, 2002. (<http://www2.ibama.gov.br/~geobr/geobrasil-pdf.htm>.)

Carvalho, G., Nepstad, D., McGrath, D., Vera-Diaz, M.D.C., Santilli, M., and Barros, A.C. Frontier Expansion in the in Amazônia. *Environment*, Volume 44, number 3, p. 34-45, April 2002.

Nepstad D., McGrath D., Alencar A., Barros A.C., Carvalho G., Santilli M., Diaz Maria del Carmen. Frontier Governance in Amazonia. *Science* 295: 629-631.

2001

Vera-Diaz Maria del Carmen, Barros A.C., Silva E.L., Alencar A. Estradas e Desenvolvimento Social na Amazônia (Roads and social development in the Amazon). In: Barros A.C. (Org.), *Sustentabilidade e Democracia para as Políticas Públicas na Amazônia*. Rio de Janeiro: Projeto Brasil Sustentável e Democrático, FASE/IPAM, 2001. p.67-88 (Cadernos Temáticos, 8).

2000

Vera-Díaz María del Carmen, Amin Mário. A Valoração Econômica da Exaustão dos Recursos Minerais do Estado do Pará. (Economic Valuation of the Mineral Resources Depletion in the state of Pará). 28th National Meeting on Economy. National Association of Graduate Centers on Economy (ANPEC). Campinas -São Paulo - Brazil, December 12-15, 2000. (Cd Rom, Art. 414, p. 1-19)

1998

Vera-Díaz María del Carmen. O Poder Político e a Preservação do Meio Ambiente. (The Political Power and the Preservation of the Environment). Belém: NAEA/UFPA, 1998. Paper 112 .

Vera-Díaz María del Carmen. Políticas Habitacionales en la Amazonía Colombiana, el Caso de Florencia Caquetá. (Public Housing Politics in the Colombian Amazon, the Case of Florencia-Caquetá) In: AMIN, Mario, XIMENES, Tereza (Eds), *Habitat nos Países Amazônicos* (Amazon Countries Habitat). Belém: UFPA/NAEA/UNAMAZ, 1998. Chapter 5, p. 238-295 (Amazon Cooperation Series, 20).

CONFERENCES AND SEMINARIES

- **2008 Annual Fall Meeting New England Council of Latin American Studies (NECLAS)**. Brown University, Providence (RI), October 4, 2008. Panelist in the session “Globalization and Sustainable Development in Latin America”
- **Debate Forum on Road Development in the Amazon**. Yale University, School of Forestry and Environmental Studies, New Haven (CT), February 17, 2007. Panelist.
- **9th Biennial Conference of the International Society for Ecological Economics on Ecological Sustainability and Human Well-Being**. The India Habitat Centre, New Delhi (India), December 15-18, 2006. Oral presentation entitles “*Assessing the Effect of Madera River Energy and Transportation Infrastructure Projects on Soybean Expansion*”.
- **The LBA-ECO 10th Science Team Meeting**. Hotel Naoum Plaza, Brasilia, October 4-6, 2006. Chair and oral presentation in the session “The Changing Amazon Landscape”.
- **Meeting “A Amazônia e a Nova Economia Global: Como Gerir o Desmatamento em uma Nova Era?”**. Instituto de Pesquisa Ambiental da Amazonia and Woods Hole Research Center, May 10-11, 2006. Participation.
- **The LBA-ECO 9th Science Team Meeting**. Conference Center of the American Chamber of Commerce (AmCham) in São Paulo Brazil, November 10-12, 2005. Chair and oral presentation in the session “Explaining Land Use”.
- **The 6th Open Meeting of the Human Dimensions of Global Environmental Change Research Community**. University of Bonn. Bonn (Germany), October 9-13, 2005. Oral presentation in the session Agriculture and Land Use.
- **XIX Annual Meeting of the Society for Conservation Biology**. Universidade de Brasilia. Brasilia (Brazil), July 15-19, 2005. Oral presentation in the symposium large-scale conservation in expanding Amazon frontiers: integrating across scales and disciplines.
- **Workshop Options for Including LULUCF Activities in a Post-2012 International Climate Agreement**. Joanneum Research / Instituto de Pesquisa

Ambiental da Amazonia / Global Carbon Project / National Institute for Environmental Studies. Graz (Austria), May 5-6, 2005. Participation.

- **Working Forest in the Tropics Conference: Policy and Market Impacts on Conservation and Management.** University of Florida, Institute of Food and Agricultural Sciences-IFAS, School of Forest Resources and Conservation. Gainesville (Florida), February 14-15, 2005. Poster
- **Forum MAP V. Mesa Desenvolvimento Economico.** Puerto Maldonado (Peru). Invited speaker, September 16-18, 2004.
- **8th LBA-ECO Science Team Business Meeting.** Brasília D.F- Brazil, July 30-31, 2004.
- **3th LBA Scientific Conference - The Large-Scale Biosphere-Atmosphere Experiment in Amazonia (LBA).** Brasília D.F- Brazil, July 27-29, 2004. Two Oral Presentations.
- **1st Users Amazon Scenarios Meeting.** Instituto de Pesquisa Ambiental da Amazônia / The Woods Hole Research Center. Lima-Peru, May 2004. Oral Presentation.
- **7th LBA-ECO Science Team Business Meeting.** Fortaleza – Ceará – Brasil, November 5-8, 2003. Oral Presentation.
- **2nd International LBA Scientific Conference.** NASA, CPTEC, INPE, CNPQ, INPA, CTBRASIL. Manaus – Amazonas - Brazil, July 7-10, 2002. Poster
- **Healthy Ecosystems and Healthy People Conference.** International Society for Ecosystem Health (ISEH), Center for Applied Biodiversity Science (CABS) and Conservation International (CI), Washington D.C., June 6-11, 2002. Poster
- **1ST International Symposium on Development of Transport Infrastructure and Environment – SITRAMA.** Transports Integrated into the Environment: The Route of Amazon Development. Universidade de Brasília – UNB, CEFTRU, Belém-Brazil, March 19-22, 2002. Participant.
- **The 7th Biennial Conference of the International Society for Ecological Economics, ISEE.** Tunisie 2002, “Environment & Development. Sousse Tunisie, March 6-9, 2002. Oral presentation of the article entitled “*Economic Impacts of Fire in the Amazon.*”
- **Working Forest Conference.** University of Florida, Institute of Food and Agricultural Sciences-IFAS, Gainesville Florida, February 26-28, 2002. Poster
- **1ST Meeting of the Brazilian Environment.** Statistical Geography Brazilian Institute (IBGE). Rio de Janeiro-Brazil, Jun 4, 2001. Participant.

- **2nd Meeting of the Working Group on Modeling Amazon Scenarios.** Instituto de Pesquisa Ambiental da Amazônia / The Woods Hole Research Center / Conservation Internacional. Belém-Brazil, May 11-13, 2001. Member of the Working Group.
- **Workshop on Global Environmental Outlook Brazil (GEO-Brazil).** Environmental Ministry/IBAMA/PNUMA. Brasília-Brazil, May 10-11, 2001. Participant.
- **Workshop on The National Forest Program / SNUC.** Environmental Ministry /IBAMA. Pirenópolis-Goiás-Brazil, April 9-11, 2001. Member of the Economical Sustainability Group.
- **Meeting of the Katoomba Working Group III.** Forest Trends. Teresópolis-Rio de Janeiro-Brazil, March 24-26, 2001. Participant.
- **Workshop on New Markets for a Green Economy.** Pro-natura / Amigos da Terra / Forest Trends. Rio de Janeiro-Brazil, March 23, 2001. Participant.
- **Workshop on The National Forest Program / SNUC.** Environmental Ministry /IBAMA. Brasília-Brazil, February 15-16, 2001. Member of the Economical Sustainability Group.
- **28th National Meeting on Economy.** National Association of Graduate Centers on Economy (ANPEC). Campinas -São Paulo - Brazil, December 12-15, 2000. Oral Presentation of the article “Economic Valuation of Depletion of the Mineral Resources of the State of Pará”. Participated as a panelist on the discussion of other papers presented at the meeting.
- **Latin American and Caribbean Experts Consultation for the 3rd Global Environment Outlook Report (GEO-3), Regional Scenarios.** United Nations Environment Programme (UNEP). Santiago - Chile, November 14-16, 2000. Participated as a representative from Brazil.
- **1ST Meeting of the Working Group on Modeling Amazon Scenarios.** The Woods Hole Research Center (WHRC) & Amazon Institute of Environmental Research (IPAM). Woods Hole – MA - USA, November 6-10, 2000. Member of the Working Group.
- **Seminar on the Criteria to Follow for the Inclusion of Forest under the Clean Development Mechanism (CDM).** Amazon Environmental Research Institute (IPAM). Belém – Pará – Brazil, October 23-24, 2000. Participant.
- **Workshop on Environmental Economics Studies.** Applied Economic Research Institute (IPEA). Rio de Janeiro – Brazil, August 9-11, 2000. Participant.

- **The Sixth Biennial Meeting of the International Society for Ecological Economics, ISEE 2000.** “People and Nature: Operationalising Ecological Economics. International Society of Ecological Economics & Australia New Zealand Society of Ecological Economics. Canberra - Austrália, July 5-8, 2000. Oral presentation of the article “*Integrating Mineral Resources Depletion into Eastern Amazonia’s GDP (Pará-Brazil)*”. Chair of the session “Green Accounting and Sustainability Modelling”.
- **Workshop on the Ecological Principles for Decision Making Process in the Amazon.** National Research Institute of the Amazon (INPA). Manaus – Amazonas - Brazil, June 1-4, 2000. Expert on Ecologic Economics.
- First LBA Scientific Conference. The Large Scale Biosphere-Atmosphere Experiment in Amazon. **MCT/CPTEC/INPE/NASA. Belém – Pará - Brazil, June 25-28, 2000. Poster “Social Cost of the Fire in the Amazon”.**
- **1st Seminar on the Project “A Sustainable and Democratic Brazil”, Amazon Chapter.** Sustainable and democratic perspectives on the relationship of the society with the Amazon forest: government policy, ecological services, international interest, and civil society participation in public policies. PBSDF/FASE/IPAM. Belém – Pará - Brazil, May 17-18, 2000. Oral presentation of the article “Highways and Social Development in the Amazon”.
- **International Symposium Amazon 21 – Agenda and Strategies for Sustainability.** UFPA/NAEA/UNAMAZ. Belém – Pará - Brazil, September 14-17, 1997. Participant.
- 2nd International Conference on Sustainable Development of the Humid Tropics. **UFPA/UNAMAZ. Belém – Pará – Brazil, May 5-9, 1996. Participant.**

DISCUSSION GROUPS

- The National Forest Program / SNUC-Brazil, member of the Economical Sustainability Group.
- Global Environmental Outlook / Latin American and Caribbean (UNEP).
- Global Environmental Outlook Brazil / GEO-Brazil (UNEP). Coordinator of the section Brazilian Amazon Scenarios.

AWARDS

- Tuition scholarship, 1997-1999 for the National Council of Scientific and Technological Development – CNPq -Brazil (Master Degree)

- Tuition scholarship, 2003-2008 for Boston University, Geography and Environment Department (Ph.D. Degree).

PROFESSIONAL ASSOCIATIONS

- International Society of Ecological Economics (ISEE)

FOREIGN LANGUAGE SKILLS

- Spanish (native)
- Portuguese (like native)
- English (speak /read/write with high proficiency)